

APPLICATION OF ADAPTIVE FILTERING IN HIGH RESOLUTION ECG

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Abstract

A description of the self-adapting filter based on the least mean square algorithm is presented and its ability in removal of the noise components in real time recording of the high resolution ECG (HRECG) is discussed. Beside the classical solution, an application of the network of the time sequenced adaptive recurrent filter is shown. Such a filter requires of an additional synchronisation algorithm, however, is able to track rapidly varying nonstationarities without smoothing effect and therefor can be used for dynamically changing ECG signals.

Keywords: adaptive filtering, exercise ECG, signal processing